



THE BOROUGH OF  
FOREST HILLS  
PENNSYLVANIA

4400 Greensburg Pike, Pittsburgh PA 15221

Allegheny County Health Department }  
Title V Operating Permit No. 0052-OP22 }  
Metallurgical Coke and Coke By-Product }  
Revision Tracking No. 87 }

March 8, 2022

Written Comments of the Borough of Forest Hills

Filed by e-mail [aqpermits@alleghenycounty.us](mailto:aqpermits@alleghenycounty.us)

Dear Dr. Bogan:

The Borough of Forest Hills welcomes this opportunity to express its encouragement to the Allegheny County Health Department (ACHD) to strongly enforce existing air quality regulations and to establish a new Title V Air Quality Permit for U.S. Steel at the Clairton Coke Works (USS) that will significantly and permanently eliminate the chronic toxic air emissions from this operation. The Clairton Plant is a major source of CO, NOX, PM, PM10, PM2.5, SO2, VOCs, and Hazardous Air Pollutants (HAPs) as defined in Article XXI §2101.20<sup>1</sup>

The Borough of Forest Hills, home to 6,429 people, is located within the air shed of the US. Steel Clairton Coke Works, the subject of this proposed Air Quality Permit renewal. The Purple Air Monitor next to Woodland Hills High School tracks the air quality daily. Our citizens have been afflicted with air quality readings rated “Not Good” at monitors within Allegheny County for 189 days (52%) between January 1 and December 31 of 2021.<sup>2</sup> This period included 51 days when the Hydrogen Sulfide Standard was violated, giving the air a “rotten egg” stench.<sup>3</sup> During the first 51 days of 2022, 23 days (45%) had air quality rated as “Not Good.”<sup>4</sup> (this includes the Purple Air Monitor on Woodside Road in Forest Hills.) The ACHD Report on Hydrogen Sulfide emissions concludes “There is no evidence that small, non-inventoried sources affect the Liberty H<sub>2</sub>S monitor concentrations at any level, including exceedance levels. Therefore, based on all available data and resources, H<sub>2</sub>S exceedances that occurred at the Liberty site during the period of January 1, 2020 through March 1, 2022 can be attributed entirely to emissions originating at

US Steel's Clairton coking facility"<sup>5</sup> Hydrogen Sulfide emissions have been associated with chronic respiratory distress and other symptoms.

The operations at the U.S. Steel Clairton Coke Works contribute daily to the poor air quality of our area. The Air Quality Permit for the Clairton Coke Works expired in 2017. Since that time, there have been ongoing negotiations between the U.S. Steel and the ACHD. However, we are concerned about the ongoing pattern of failure to redress longstanding issues that affect the health of our community. The December 24, 2018 fire and explosion at the Clairton Coke Works resulting from deterioration of the piping in the structure destroyed the air pollution control and monitoring equipment within the plant. The plant operated without pollution controls until April 3, 2019. Untreated coke oven gases were piped to the taller emissions stack at the Irwin works where they were dispersed over a wider area, farther from monitoring stations. On June 27, 2019, ACHD and US Steel entered into a Settlement Agreement specifying a series of corrective actions to improve the emissions from the Clairton Coke Works.<sup>6</sup> The ACHD has imposed a series of fines on US Steel for failure to comply with pollution abatement orders, most recently fines of \$859,300 for Article XXI Air Pollution Control violations and permit violations that the health department says occurred at Clairton Coke Works during the second, third and fourth quarters of 2021.<sup>7</sup> US Steel has appealed the fines and the orders. Nevertheless, the plant continues operation and there has been no permanent remediation to the underlying problems of chronic emission violations. This pattern of promises, failure to comply, fines and court challenges has gone on for over 50 years.

In April 2021, U.S. Steel announced that it would retire three of its oldest batteries by the first quarter of 2023, as it backed away from previously announced \$1 billion in local investments.<sup>8</sup> Since that time, USS has made an investment of \$3 Billion in an electric arc steel mill in Osceola Arkansas, to begin operation in 2024.<sup>9</sup> We are concerned that US Steel emissions from the Clairton Coke Works will continue unabated and that our air quality will continue to deteriorate without stronger air quality control by the ACHD.

Poor air quality has a direct negative affect on all citizens within the plume of these ongoing emissions. Nearly 90% of the point source cancer risk estimated in Allegheny County is attributable to coke oven emissions, with 90% of those emissions coming from the Clairton facility.<sup>10</sup> Senior citizens and children, 25.2% of our population, are more susceptible to health effects from chronic air pollution.<sup>11</sup> A recent study of asthma rates in Clairton, Woodland Hills, Allegheny Valley, Northgate, and Gateway school districts showed the presence of asthma in 22.5% of the children, compared to a national average of 8.2%.<sup>12</sup> In older adults, air pollution was linked to a greater chance of developing several neurological disorders, including Parkinson's disease, Alzheimer's disease, and other dementias. Hospital admissions data from 63 million older adults in the U.S., obtained over 17 years (2000-2016), was analyzed along with estimated PM 2.5 concentrations by zip code to conduct the study.<sup>13</sup>

Air pollution exposure is associated with oxidative stress and inflammation in human cells, which may lay a foundation for chronic diseases and cancer. In 2013, the International Agency for Research on Cancer of the World Health Organization (WHO) classified air pollution as a human carcinogen.<sup>14</sup> For the sake of protecting the health and well-being of our citizens, the ACHD must adopt a more effective and enforceable Air Permit for the U.S. Steel Clairton Coke Works.

The Borough of Forest Hills makes four recommendations to the ACHD in considering the renewal of the US Steel Air Quality Permit for the Clairton Coke Works:

- 1. Require the immediate closure of Batteries 1, 2, and 3 to reduce air emissions by 17 percent.** ACHD should codify in the Permit US Steel's public commitment to shut down their oldest coke oven batteries (No. 1, No. 2, and No. 3) and to do so by the first quarter of 2023. This would likely improve air quality and community health. Because of loopholes in clean air rules for older plants, those batteries are legally permitted to emit two to three times more pollution than newer coke ovens. Batteries 1, 2, and 3 are nearly 70 years old, and should have been upgraded or replaced decades ago.
- 2. ACHD must take action to make U.S. Steel comply with local air pollution rules.** Actions stipulated in the Settlement Agreement have not been carried out. US Steel pays the fines and appeals the orders in court and continues polluting unabated. ACHD should not rely on self-reporting of emissions monitoring by US Steel. Rather, ACHD should install real-time monitors around the plant that report directly to ACHD Air Quality Program staff and members of the community to measure PM2.5, sulfur compounds, and air toxics. ACHD must revise the permit to stop the ongoing emissions violations by requiring the plant to cease operations from specific batteries until the source of the violations is certified as corrected. This action is within the powers of the ACHD under **Section 2109.03 Enforcement** of its regulations.
- 3. The new Permit must specify an enforceable Compliance Plan for bringing the chronic air emission violations into compliance.** The actions specified in this Compliance Plan must be enforced by ceasing operations of the non-compliant facilities or parts of facilities until the corrections have been completed. U.S. Steel must spend money to fix air pollution problems at its Clairton Coke Works in a manner that permanently improves air quality. Fines alone have proven ineffective in assuring compliance in these operations. All fines collected should be distributed to affected communities to address health protection actions.
- 4. The ACHD must act as soon as possible to update its air permit regulations and standards.** The conditions we experience now call for urgent action to reduce or

eliminate the combustion of fossil fuels to address crisis levels of carbon emissions.<sup>15</sup> As the economy of our region moves toward a more high-tech profile, the quality of life will be a factor in determining the participation of communities in the Mon Valley, including Forest Hills. A constant rating of “Not Good” air quality seriously impedes the prospects for new opportunities and investment. Generations of children have grown up with increased risk of asthma, and elderly and other sensitive populations experience asthma and respiratory distress at levels three times higher than the national average. For all our citizens who live with the constant pollution from this operation, fines do not alleviate the distress.

We recognize that regulating an entity of the vintage of the US Steel Coke Works and associated steelmaking facilities poses a severe challenge. Layers upon layers of legal entanglement have been piled on, complicated by the politics of keeping in the good graces of a traditionally major employer. However, the conditions of today demand that we address reality: this hundred-year-old facility has a significant and continuing negative effect on the health of citizens throughout the Mon Valley who must live in the plume of uncontrolled emissions. It is the obligation of the ACHD to protect the health of all the citizens of Allegheny County. We urge you to stand for the Constitution of the Commonwealth of Pennsylvania assurance to all its citizens:

**“The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment.”**

Article 1 §27

**We hereby incorporate by reference the Technical Comments of the Environmental Integrity Project.**

Respectfully submitted on behalf of the Borough of Forest Hills, as approved on March 8, 2022.

Sincerely,



Patricia M. DeMarco, Ph.D.  
Vice President  
Forest Hills Borough Council

## Citations and Resources:

---

- <sup>1</sup> U.S. Steel Clairton Coke Works DRAFT Title V Operating Permit #0052-OP22 [uss-clairton-tvrv-draft.pdf](#)
- <sup>2</sup> United States Environmental Protection Agency. Air Data AQI Plot <https://www.epa.gov/outdoor-air-quality-data/air-data-aqi-plot> Accessed March 6, 2022
- <sup>3</sup> Patrick Campbell. Group Against Smog and Pollution. “Tuesday Marked First Hydrogen Sulfide Exceedance of the Year for Allegheny County. January 5, 2022. <https://gasp-pgh.org/2022/01/05/tuesday-marked-first-hydrogen-sulfide-exceedance-of-the-year-for-allegheny-county/> Accessed March 6, 2022.
- <sup>4</sup> United States Environmental Protection Agency. Air Data AQI Plot <https://www.epa.gov/outdoor-air-quality-data/air-data-aqi-plot> Accessed March 6, 2022.
- <sup>5</sup> Allegheny County Health Department. Analysis and Attribution of Hydrogen Sulfide (H<sub>2</sub>S) Exceedances at the Liberty Monitoring Site from January 1, 2020 through March 1, 2022. Allegheny County Health Department, Air Monitoring Program. March 3, 2022. [https://www.alleghenycounty.us/uploadedFiles/Allegheny\\_Home/Health\\_Department/Programs/Air\\_Quality/H2S\\_Report\\_03032022.pdf](https://www.alleghenycounty.us/uploadedFiles/Allegheny_Home/Health_Department/Programs/Air_Quality/H2S_Report_03032022.pdf) Accessed March 6, 2022
- <sup>6</sup> Allegheny County Health Department. Air Quality Program. In the Matter of: United States Steel Corporation- Mon Valley Works. Order #19060 Settlement Agreement and Order. June 27, 2019. [https://www.alleghenycounty.us/uploadedFiles/Allegheny\\_Home/Health\\_Department/Resources/Legal/Docket/USS-ACHD-Settlement-Agreement-and-Order-190604.pdf](https://www.alleghenycounty.us/uploadedFiles/Allegheny_Home/Health_Department/Resources/Legal/Docket/USS-ACHD-Settlement-Agreement-and-Order-190604.pdf) Accessed March 6, 2022
- <sup>7</sup> Jordan Hronec. “Health Department Hits US Steel with Penalties.” Pittsburgh Business Times. March 4, 2022. <https://www.bizjournals.com/pittsburgh/news/2022/03/04/health-department-hits-u-s-steel-with-penalties.html> Accessed March 6, 2022.
- <sup>8</sup> Oliver Morrison. “US Steel announces closure of several of Clairton’s “dirtiest” coke oven batteries.” Public Source. April 30, 2021. <https://www.publicsource.org/mon-valley-clairton-us-steel-coke-works-pollution-f-grade-air-quality/> Accessed March 6, 2022.
- <sup>9</sup> Manufacturing.Net. “U.S. Steel Bringing \$3 B Mill to Arkansas.” Associated Press. January 12, 2022. <https://www.manufacturing.net/supply-chain/news/21993054/us-steel-bringing-3-billion-mill-to-northeast-arkansas> Accessed March 6, 2022.
- <sup>10</sup> Cancer and Environment Network of Southwestern Pennsylvania. “National Air Toxics Assessment and Cancer Risk in Allegheny County Pennsylvania. Updated May 2021. <https://censwpa.org/wp-content/uploads/2021/07/NATA-Factsheet.pdf> Accessed March 7, 2022

---

<sup>11</sup> Unites States Census Bureau. Quick Facts- Forest Hills Borough, Pennsylvania. <https://www.census.gov/quickfacts/foresthillsboroughpennsylvania> Accessed March 7, 2022.

<sup>12</sup> Deborah A. Gentile, Tricia Morpew , Jennifer Elliott , Albert A. Presto & David P. Skoner (2020): Asthma Prevalence and Control among Schoolchildren Residing near Outdoor Air Pollution Sites, Journal of Asthma. <https://doi.org/10.1080/02770903.2020.1840584>

<sup>13</sup> Shi L, Wu X, Danesh Yazdi M, Braun D, Abu Awad Y, Wei Y, Liu P, Di Q, Wang Y, Schwartz J, Dominici F, Kioumourtzoglou MA, Zanobetti A. Long-term effects of PM<sub>2.5</sub> on neurological disorders in the American Medicare population: a longitudinal cohort study. Lancet Planet Health. 2020 Dec;4(12):e557-e565. doi: 10.1016/S2542-5196(20)30227-8. Epub 2020 Oct 19. PMID: 33091388; PMCID: PMC7720425.

<sup>14</sup> National Institute for Environmental Health Sciences. National Institute of Health. Air Pollution and Health. <https://www.niehs.nih.gov/health/topics/agents/air-pollution/index.cfm> Accessed MArch 7, 2022.

<sup>15</sup> United Nations Intergovernmental Panel on Climate Change. Climate Change 2022: Impacts, Adaptation and Vulnerabilities. Working Group II contribution to the Sixth Assessment Report. February 27, 2022. IPCC\_AR6\_WGII\_SummaryForPolicymakers.pdf <https://www.unep.org/resources/report/ipcc-sixth-assessment-report-climate-change-2022> Accessed March 7, 2022.